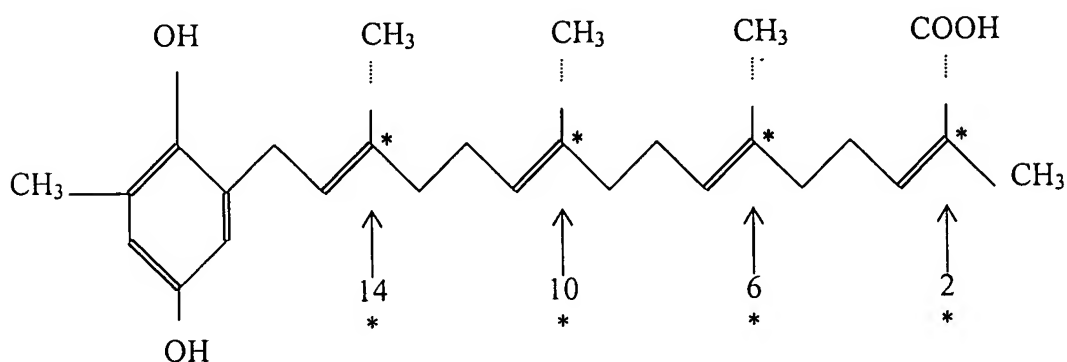


## CLAIMS

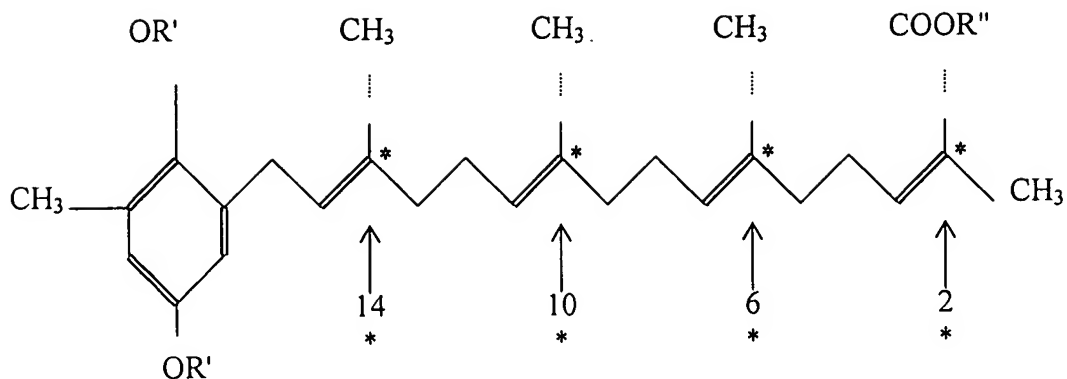
What is claimed is:

1. An antioxidant comprising a hydroquinone substituted polyunsaturated fatty acid that is useful in the treatment of cancer.
2. The antioxidant of Claim 1, wherein said hydroquinone substituted polyunsaturated fatty acid comprises the chemical of the formula



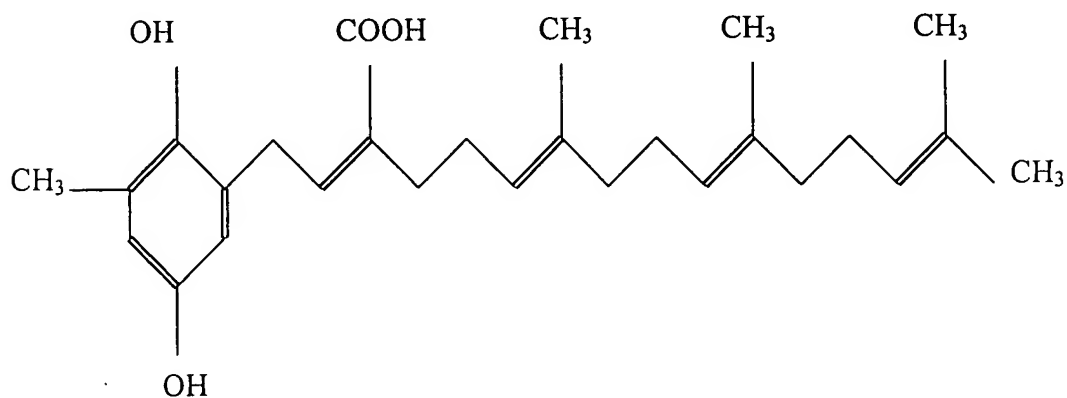
where the carboxy (COOH) group shown at position 2, can interchange, forming individual and separate chemical entities, with methyl (CH<sub>3</sub>) groups at position 6, or position 10, or position 14.

3. The antioxidant of Claim 1, wherein said hydroquinone substituted polyunsaturated fatty acid is a derivative of said hydroquinone substituted polyunsaturated fatty acid.
4. The antioxidant of Claim 3, wherein said derivative of said hydroquinone substituted polyunsaturated fatty acid comprises the chemical of the formula

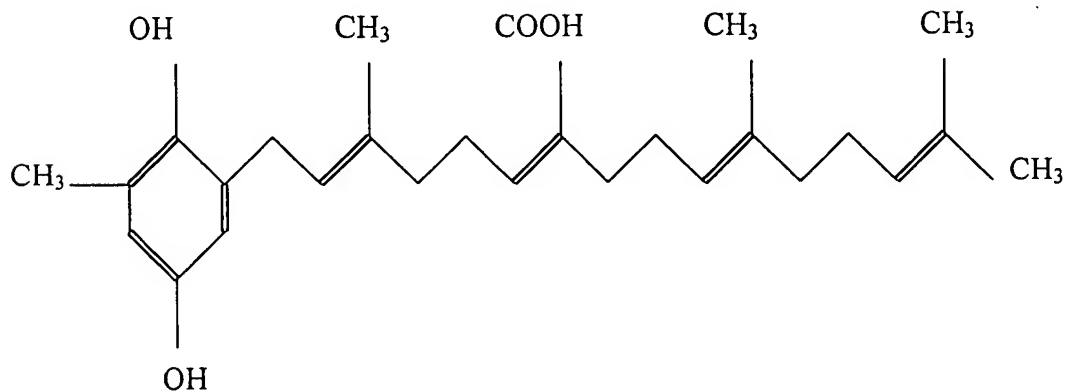


where R' represents an acyl group and R'' represents an alkyl group.

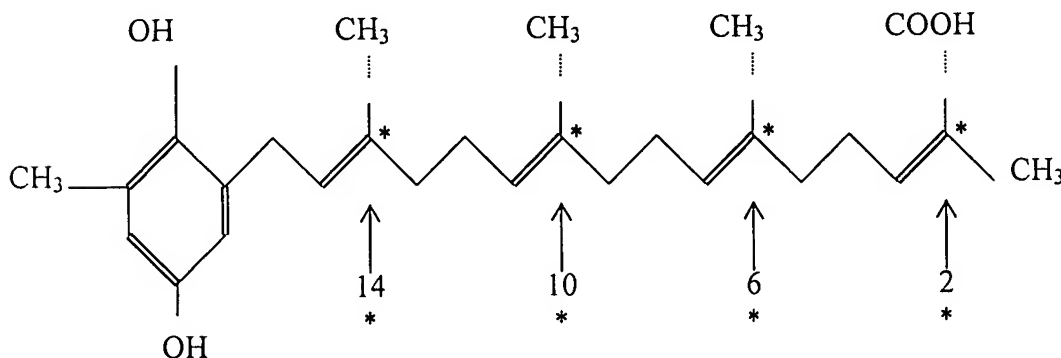
5. The antioxidant of Claim 3, wherein said derivative of said hydroquinone substituted polyunsaturated fatty acid comprises the chemical of the formula



6. The antioxidant of Claim 3, wherein said derivative of said hydroquinone substituted polyunsaturated fatty acid comprises the chemical of the formula

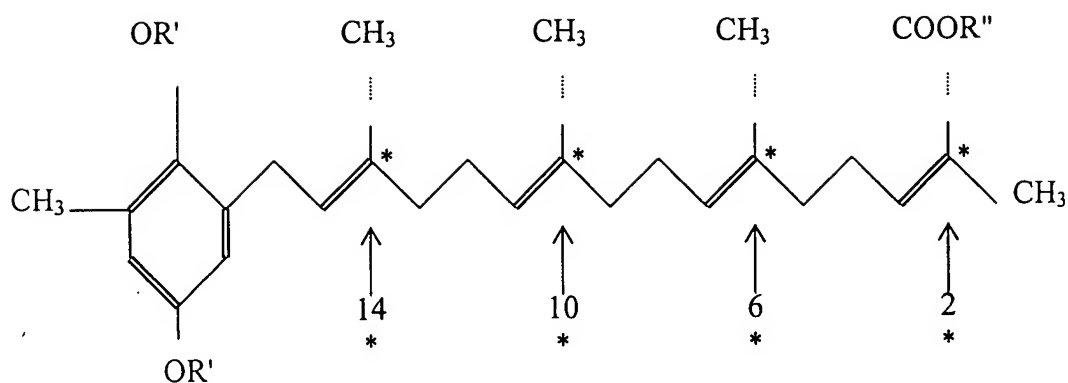


7. An antioxidant comprising a hydroquinone substituted polyunsaturated fatty acid that is useful in the treatment of cognitive disorders.
8. The antioxidant of Claim 7, wherein said cognitive disorder is selected from the group consisting of Alzheimer's disease, learning disabilities, behavioral problems, and senile dementia.
9. The antioxidant of Claim 7, wherein said hydroquinone substituted polyunsaturated fatty acid comprises the chemical of the formula



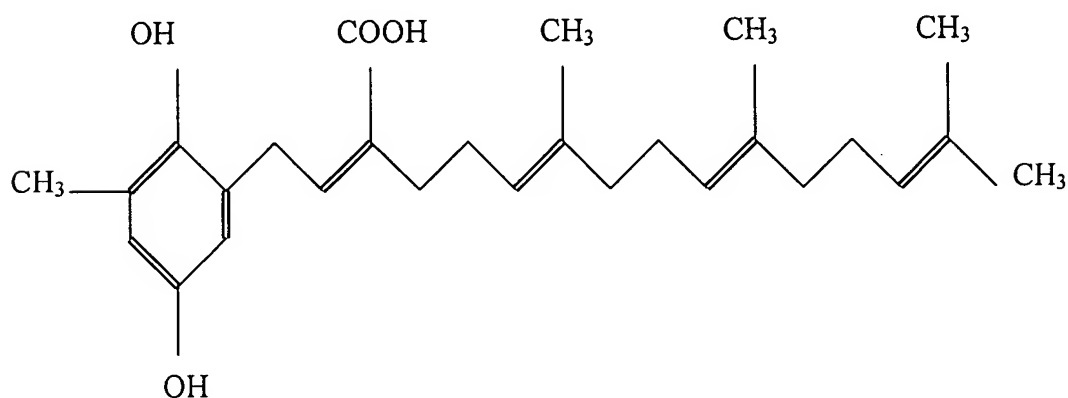
where the carboxy (COOH) group shown at position 2, can interchange, forming individual and separate chemical entities, with methyl (CH<sub>3</sub>) groups at position 6, or position 10, or position 14.

10. The antioxidant of Claim 7, wherein said hydroquinone substituted polyunsaturated fatty acid is a derivative of said hydroquinone substituted polyunsaturated fatty acid.
11. The antioxidant of Claim 10, wherein said derivative of said hydroquinone substituted polyunsaturated fatty acid comprises the chemical of the formula

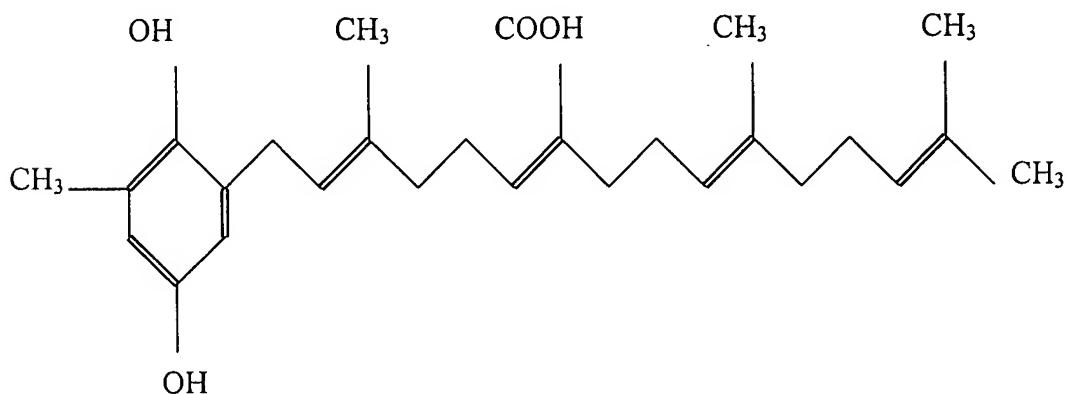


where R' represents an acyl group and R'' represents an alkyl group.

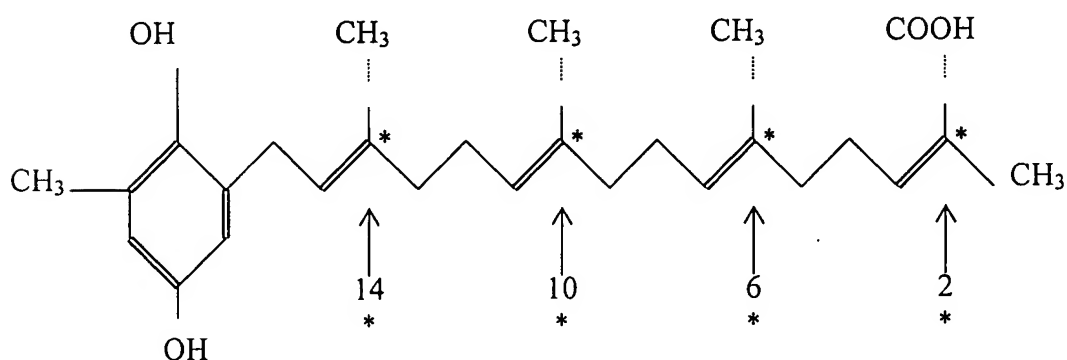
12. The antioxidant of Claim 10, wherein said derivative of said hydroquinone substituted polyunsaturated fatty acid comprises the chemical of the formula



13. The antioxidant of Claim 10, wherein said derivative of said hydroquinone substituted polyunsaturated fatty acid comprises the chemical of the formula

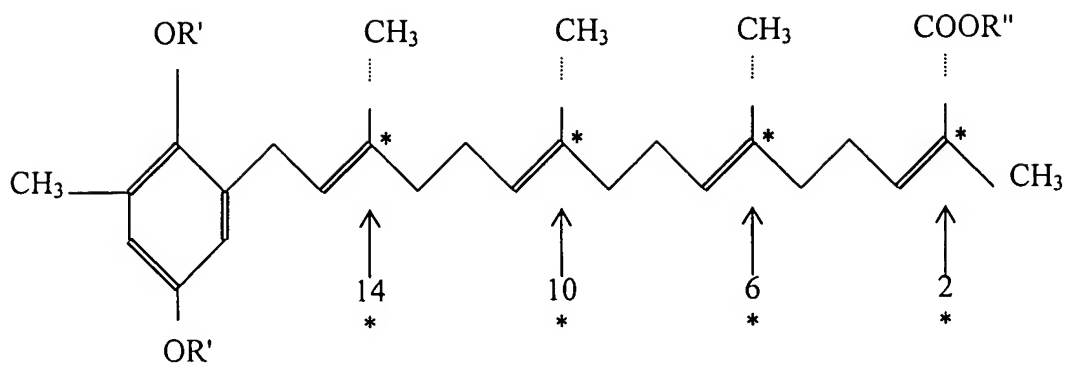


14. A method for treating cognitive disorders comprising administering a hydroquinone substituted polyunsaturated fatty acid to a patient in need of such treatment.
15. The method of Claim 14, wherein said cognitive disorder is selected from the group consisting of Alzheimer's disease, learning disabilities, behavioral problems, and senile dementia.
16. The method of Claim 14, wherein said hydroquinone substituted polyunsaturated fatty acid comprises the chemical of the formula



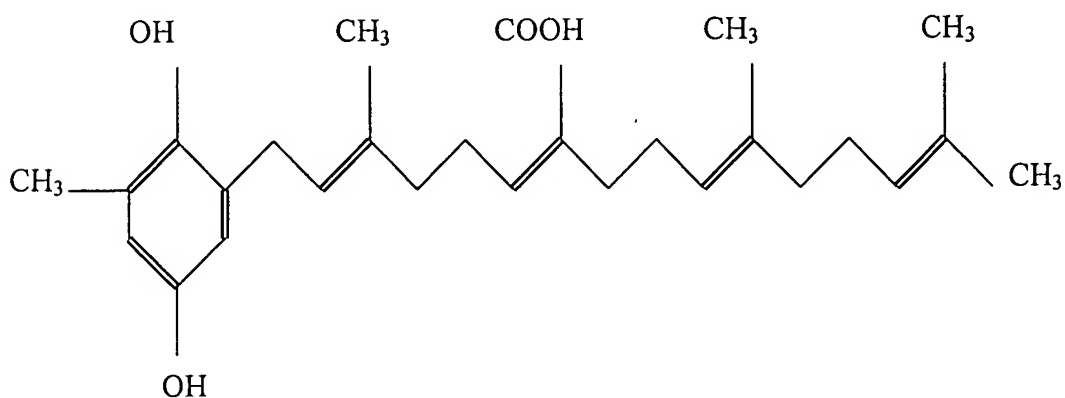
where the carboxy (COOH) group shown at position 2, can interchange, forming individual and separate chemical entities, with methyl (CH<sub>3</sub>) groups at position 6, or position 10, or position 14.

17. The method of Claim 14, wherein said hydroquinone substituted polyunsaturated fatty acid is a derivative of said hydroquinone substituted polyunsaturated fatty acid.
18. The method of Claim 17, wherein said derivative of said hydroquinone substituted polyunsaturated fatty acid comprises the chemical of the formula

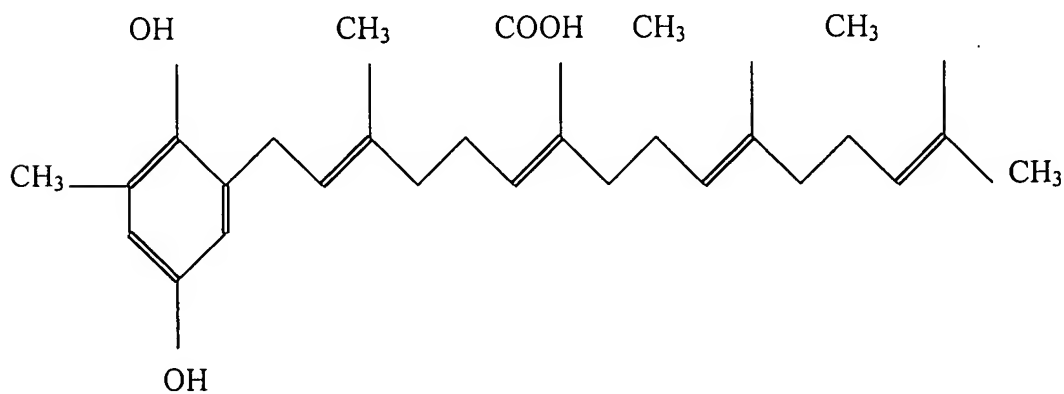


where R' represents an acyl group and R'' represents an alkyl group.

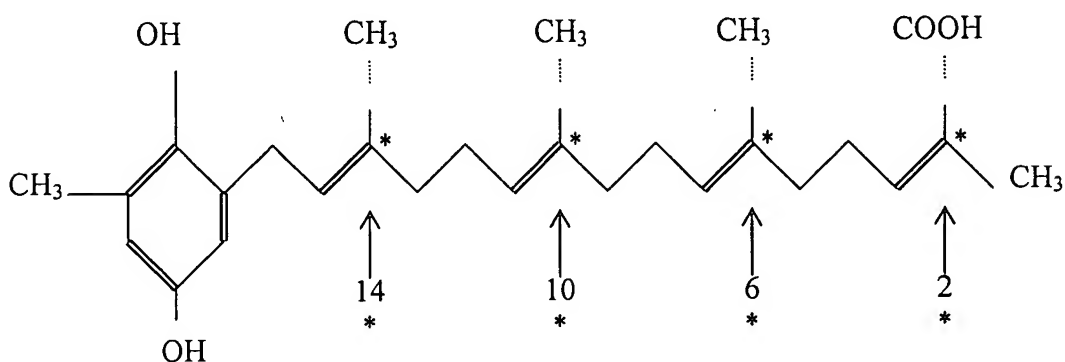
19. The method of Claim 17, wherein said derivative of said hydroquinone substituted polyunsaturated fatty acid comprises the chemical of the formula



20. The method of Claim 17, wherein said derivative of said hydroquinone substituted polyunsaturated fatty acid comprises the chemical of the formula

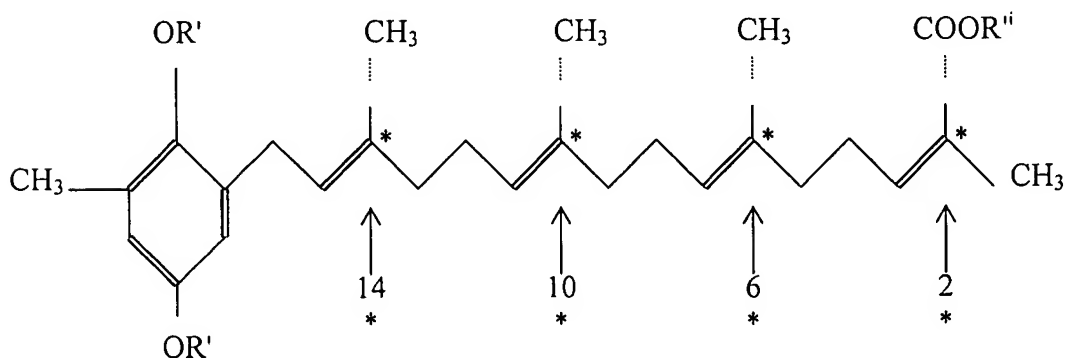


21. An antioxidant comprising a hydroquinone substituted polyunsaturated fatty acid that is useful in the inhibition of cell proliferation.
22. The antioxidant of Claim 21, wherein said hydroquinone substituted polyunsaturated fatty acid comprises the chemical of the formula



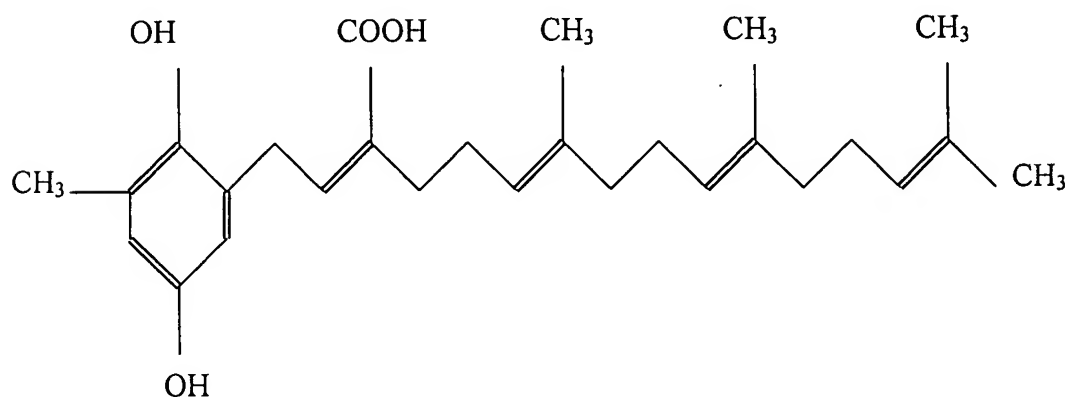
where the carboxy (COOH) group shown at position 2, can interchange, forming individual and separate chemical entities, with methyl (CH<sub>3</sub>) groups at position 6, or position 10, or position 14.

23. The antioxidant of Claim 21, wherein said hydroquinone substituted polyunsaturated fatty acid is a derivative of said hydroquinone substituted polyunsaturated fatty acid.
24. The antioxidant of Claim 23, wherein said derivative of said hydroquinone substituted polyunsaturated fatty acid comprises the chemical of the formula



where R' represents an acyl group and R'' represents an alkyl group.

25. The antioxidant of Claim 23, wherein said derivative of said hydroquinone substituted polyunsaturated fatty acid comprises the chemical of the formula



26. The antioxidant of Claim 23, wherein said derivative of said hydroquinone substituted polyunsaturated fatty acid comprises the chemical of the formula

